

I. PERSONAL PROTECTIVE EQUIPMENT

- A. Purpose: To provide a guideline by which all personnel will effectively use all personal protective equipment afforded to them while operating in hazardous working environments.
- B. Scope: This procedure will effect all personnel operating within the Fire/Rescue division and those outside the Division that operate at the scene of any emergency where the Conover Fire Department is operating in any capacity. Any deviation from this procedure must be approved by the Fire Chief or the Incident Commander, who will bear complete responsibility of the deviation.
- C. General: These procedures will apply to all employees involved in any emergency or training exercise that involves the Conover Fire Department.
 - 1. All responding personnel, with the exception of the Driver/Operator, shall, during all emergency responses that may require immediate action upon arrival, wear full protective clothing.
 - 2. Either while enroute or upon arrival, and as needed and required, all personnel will utilize all other personal protective equipment available to them, such as;
 - a) Self-Contained Breathing Apparatus
 - b) P.A.S.S. devices
 - c) Infectious Control Materials
 - d) Hearing Protection
 - e) Eye Protection
 - 3. Personal Protective Equipment (PPE) will consist of protective clothing, self contained breathing apparatus, and other personal safety devices that are designed to provide protection to firefighters when engaged with firefighting and other associated hazards that would require use of some type of PPE.
- D. Protective Clothing
 - 1. Commonly referred to as “turn-out” or “bunker” gear, protective clothing will consist of pants, a jacket, a helmet, protective Nomex or PBI protective hood, gloves, and boots that are approved for structural firefighting, however not limited to such operations.

Personal Protective Equipment Standard Operating Guideline
Conover Fire Department

- a) Protective clothing is designed to be used with various types of incidents that fire department may come in contact with.
2. Bunker gear and / or PPE should not be expected to offer complete and a high level of protection to the wearer, however is suitable for lesser hazards that may be encountered while operating on emergency incident scenes, grass/woods fires, and other minor hazardous materials incidents.
3. Protective clothing is issued to each individual by the department.
 - a) If an individual chooses to purchase their own personnel bunker gear or PPE, it will meet all applicable OSHA and all applicable NFPA standards; NO EXCEPTIONS.
 - (1) This includes and is not limited to firefighting and / or rescue helmets or any other PPE that can be purchased,
 - (a) It is the individual's responsibility to properly care for his/her issued equipment.
 - (b) The City of Conover will not be responsible or liable for damage caused to the equipment or complete destruction of the equipment.
4. A commercial washer and dryer are available at Station One for the laundering of soiled protective clothing.
 - a) Boots and helmets may be cleaned with mild soap and water.
 - b) Gear should never be stored damp or left in direct sunlight.
 - c) Any and all protective clothing that is in need of commercial cleaning should be brought to the attention of the Fire Chief.
5. Protective clothing will be worn at all times when involved in or on the scene of any type of firefighting, interior smoke investigation, extrication, and other situations that has the potential to pose a personal injury hazard to the member that protective clothing may prevent or at a minimum afford protection.
 - a) All Engineers, Traffic Officers, and other members that are not required or needed to wear full protective structural gear will wear, at a minimum, a helmet and a reflective vest and/or bunker coat when operating on or near public streets or highways.

Personal Protective Equipment Standard Operating Guideline
Conover Fire Department

6. It will be considered mandatory for all fire department personnel operating in any hazardous environment where an oxygen deficiency or any type of hazardous inhalant could cause injury or death that Self-Contained Breathing Apparatus be worn and operated properly.
 - a) These situations shall include but are not limited to:
 - b) All reported or actual structural fires / including salvage & overhaul
 - c) All automobiles fires
 - d) All dumpster or trash fires
 - e) When conducting a search of a structure for a reported fire or activated fire alarm
 - (a) Have SCBA and mask with you however not on air
 - f) Any potential or reported Hazardous Materials Incident or Investigation
 - g) Apparatus working on an active fire scene will be required to wear the proper complement of firefighting protective equipment.
7. All protective clothing will be worn in the proper fashion.
 - a) Failure to wear any protective clothing correctly may result in personal injury.
 - b) Failure to wear protective clothing and / or wear protective clothing and / or ensemble correctly may result in The State of North Carolina withholding an employee's Worker's Compensation benefits in cases where the employer has provided appropriate safety appliances and protective equipment to the employee that would have prevented the injury, but which the employee failed to wear or wear properly as it is intended to be worn.

II. SELF-CONTAINED BREATHING APPARATUS

Personal Protective Equipment Standard Operating Guideline
Conover Fire Department

- A. Commonly referred to as SCBA or “air packs”, self-contained breathing apparatus provides respiratory protection in dangerous atmospheres including oxygen-deficiency, toxic gases, elevated temperatures, and smoke.
1. Only members qualified to use SCBA will do so.
 - a) Qualification requires that each individual pass a physical screening, respiratory testing, and facepiece fit test administered by Conover Fire Department.
 - b) Member must be trained on the proper use and emergency procedures for the SCBA used by Conover Fire Department.
 2. SCBA will be worn when involved in any type of firefighting (including vehicle fires and rubbish fires) with the exception of grass and woods fires.
 3. SCBA will also be worn during any possibly dangerous atmosphere including overhaul and initial investigations of unknown odors.
 - a) Electronic gas detection equipment will be used to verify that the atmosphere is safe before any personnel are allowed to remove SCBA.
 4. SCBA will be properly cleaned, disinfected, and refilled after each use and returned to its proper location ready for service.
- B. Self Contained Breathing Apparatus Use
1. Self Contained Breathing Apparatus will be used by all personnel who are exposed to respiratory hazards or who will be exposed to such hazards without warning.
 - a) Personnel that are operating in areas that may be subject to the hazards with sufficient warning to don breathing apparatus, will have respiratory protection equipment readily available for use.
 2. Self Contained Breathing Apparatus will be used by all personnel operating in confined spaces, below ground level, or where the possibility of a contaminated or oxygen deficient atmosphere exists.
 3. Personnel using Self Contained Breathing Apparatus will operate in teams of two or more who are in communications with each other through visual, audible, physical, safety lines, (rope, hose line) or other means to coordinate their activities and are in close proximity to each other to provide assistance in case of an emergency.

Personal Protective Equipment Standard Operating Guideline
Conover Fire Department

- a) All personnel engaged in interior structural fire suppression operation beyond the incipient stage must use Self Contained Breathing Apparatus, work in teams of two (2) or more and maintain voice or visual contact with one another at all times.
 - b) OSHA requires that at least one team of two (2) properly equipped and trained personnel be outside a structure before any team or teams of personnel enter a structure fire or an IDLH atmosphere.
4. The exterior team will be composed of one member who is specifically responsible for accountability of the interior team and, can initiate a rescue.
- a) There must be at least four (4) individuals at the site.
 - b) One of the two (2) individuals outside the hazard area can be assigned to another task, provided that the second assignment does not interfere with the performance of the standby role.
5. If an incident escalates and accountability cannot be properly maintained from a single vantage point, and if the structure is large enough to require entry at different locations or levels, an additional exterior rescue team is required.
- a) At no time will the primary pump operator be counted as one of the rescue personnel.
6. If an immediate action is necessary to save a life, an exception or deviation to the two- in / two- out rule is permitted.
7. Division / sector officers will monitor personnel operating in and around such divisions for signs of fatigue or factors that can result in unsafe conditions, and replace personnel as needed to provide for effective and safe firefighting operations.
8. Personnel operating in the Hazardous Atmosphere will not remove the Self Contained Breathing Apparatus until the Command Officer has issued the decision.
- a) The decision will be based on information the Command Officer receives from the Division Officers after proper air monitoring has taken place.
 - b) The Carbon Monoxide levels as well as other gases actually increase during salvage and overhaul due to incomplete combustion.

Personal Protective Equipment Standard Operating Guideline
Conover Fire Department

9. The low air alarm systems on the Self Contained Breathing Apparatus are designed to provide an approximate five minute evacuation time from the hazardous atmosphere when activated.
 - a) As the alarm sounds personnel operating in a hazardous atmosphere will immediately notify the Incident Commander or the Operations Section of that division and begin evacuation.
10. The Division Officer / Sector Officer may, depending on the urgency and the conditions at that time, evacuate all personnel within that division until adequate manpower can be achieved.
11. Self Contained Breathing Apparatus will not be worn when conditions prevent a good face seal.
 - a) Such conditions may be beards, excessive facial hair, sideburns, a skull cap that projects under the face piece, or temple pieces on glasses.
 - b) The absence of one or both dentures can seriously affect the fit of a face piece.
 - c) If eye glasses are worn, the person will use frames that do not pass through the seal area of the face piece.

C. Training

1. For safe use of a SCBA, it is essential that the user be properly instructed in its use and maintenance.
 - a) All personnel will be instructed by a Qualified Instructor along with new personnel meeting the criteria and performance objectives for SCBA use.
 - b) Training will be conducted no less than annually for all personnel.

D. Breathing Apparatus Assignments

1. All Fire Department apparatus are equipped with a minimum of (4) 4500 p.s.i. Scott self-contained breathing apparatus.
 - a) Each SCBA is labeled as to the apparatus it is assigned to.
 - b) Every attempt should be made to keep the correct SCBA with the correct apparatus.

Personal Protective Equipment Standard Operating Guideline
Conover Fire Department

2. Each employee of the Fire Department that engages in firefighting activities with the use of SCBA has been issued a face-piece that is to be utilized with the Scott 4500psi 4.5 breathing apparatus.
 - a) It is the responsibility of the individual to keep this mask in good working order.
 - b) Any repairs that are needed should be directed to one of the Fire Department's in-house breathing apparatus specialists.
3. Breathing Apparatus will be used by any fire department personnel that enters a potentially hazardous / contaminated environment to perform fire suppression / rescue or hazardous materials abatement activity or in any potentially oxygen deficient environment.
4. This includes any environment outdoors, indoors or in a confined space.

E. Preventive Maintenance

1. On-Duty Engineers / firefighters will conduct a weekly maintenance check on all SCBA using the information weekly SCBA maintenance form.
 - a) A record will be kept of all maintenance checks and findings along with dates and repairs made.
2. SCBA developing an operating problem will immediately be taken out of service and a written work order filed for shift personnel.
 - a) No SCBA will be left on any apparatus with a problem operating.
3. Only trained personnel are to make any repairs or adjustments to an SCBA.
 - a) However no attempt will be made to replace components or make adjustment's beyond the manufacturer's recommendations.

F. Inspection, Cleaning and Sanitizing SCBA and Face Piece

1. Self Contained Breathing Apparatus will be inspected and properly put back into service after each use.
2. Personnel using a Self Contained Breathing Apparatus under any condition are expected to do the following after each use:
 - a) Ensure a minimum of 4200 psi in cylinder.
 - b) Inspect all lines and connections.

Personal Protective Equipment Standard Operating Guideline
Conover Fire Department

- c) Ensure harness/mask straps are adjusted out to the don position.
- d) Turn SCBA on and check for normal operation. (Confirm no leaks)
- e) Check exhalation valve for proper operation.
- f) Ensure bypass / purge valve is closed.
- g) Shut cylinder valve, and breathe until low-air alarm sounds to ensure operation.
- h) Clean SCBA with mild soap and water if needed.
- i) Clean and sanitize face piece as listed below:
 - (1) Rinse in warm water to remove ash, dirt, soot, etc.
 - (2) Carefully wash in warm water, and mild soap detergent
 - (3) Rinse face piece in fresh warm water
 - (4) Immerse the face piece in the disinfecting solution
 - (5) Rinse the face piece thoroughly in fresh warm water
 - (6) Hang face piece to dry over air pack in its stored location
 - (a) If face piece is just put on, you must follow the disinfecting guidelines listed above.

G. SCBA Storage

- 1. After inspection and cleaning, SCBA will be stored back in their respectful location on each apparatus, with straps and harness assembly readily accessible for the next operator.
 - a) Any problems with SCBA holding brackets should be reported.

III. **PERSONAL ALERT SAFETY SYSTEMS**

- A. Commonly referred to as PASS devices, personal alert safety systems are designed to alert other personnel of the need to assist the user.

Personal Protective Equipment Standard Operating Guideline
Conover Fire Department

1. The PASS device will sound an alarm if the wearer is motionless for 30 seconds.
 2. PASS devices may also be manually activated if the wearer is in need of immediate assistance.
- B. Personal Alert Safety Systems are to be worn by firefighters that will emit an audible alarm signal to summon aid in the event the firefighter becomes incapacitated, or needs assistance.
- C. These devices and their use will pertain to all fire department personnel while operating in a hazardous environment where the possibility of injury is present.
- D. All Fire Department personnel involved in rescue, firefighting, or other hazardous duties while wearing a self-contained breathing apparatus, will use the integrated Personal Alert Safety System device (PASS) provided on the Scott 4.5 breathing apparatus.
- E. An integrated PASS device system is part of each SCBA unit.
- F. Each device will be tested on a weekly basis and prior to each use, and will be maintained in accordance with the manufacturer's instructions.
1. All Batteries will be replaced in January and July of each year or any other time indicated.
- G. The PASS alarm is integrated into the Scott 4.5 SCBA device used by the department.
1. It is activated upon the opening of the air cylinder and must be turned off by the user.
- H. A panic alarm button is located on top of the indicator device.
1. This button may be activated at anytime by the user to indicate a problem.
 2. Air does not need to be flowing to initiate a panic alarm.
- I. In the normal operations mode, the PASS will go into the first pre-alarm when 20 seconds of non-movement is detected with four (4) red lights flashing on the outside of the PASS window.
1. After another 5 seconds, the second pre-alarm will sound.
 2. After another 5 seconds, the third pre-alarm will sound. .

Personal Protective Equipment Standard Operating Guideline
Conover Fire Department

3. After another 5 seconds (totaling 35 seconds), the PASS will go into full alarm.
 - a) Each pre-alarm and the full alarm have a different tone.
4. The user must reset the full alarm activation by pressing the side-mounted button on the indicator device twice.
 - a) This will return the device to normal operation.
- J. Simple movement by the user will reset the pre-alarm warning.
- K. Upon placing the SCBA back in-service (turning off the air cylinder), the user will need to turn off the PASS alarm by depressing the side-mounted button twice.
 1. This will deactivate the alarm and turn off the green lights on the indicator panel.
- L. If the device “chirps” or fails to operate in the manner indicated above the entire SCBA is to be taken out-of-service and tagged.
 1. The On-Duty Engineers will make arrangements to contact the vendor for repair of the unit.
 2. Replace the unit taken out of service with a spare SCBA.